

described with an embodiment comprises not only prior art means, but also means for implementing the one or more functions of a corresponding apparatus described with an embodiment and it may comprise separate means for each separate function, or means may be configured to perform two or more functions. For example, these techniques may be implemented in hardware (one or more apparatuses), firmware (one or more apparatuses), software (one or more modules), or combinations thereof. For a firmware or software, implementation can be through modules (e.g. procedures, functions, and so on) that perform the functions described herein. The software codes may be stored in any suitable, processor/computer-readable data storage medium (s) or memory unit(s) or article(s) of manufacture and executed by one or more processors/computers. The data storage medium or the memory unit may be implemented within the processor/computer or external to the processor/computer, in which case it can be communicatively coupled to the processor/computer via various means as is known in the art.

[0058] The signalling chart of FIG. 6 illustrates the required signalling. In the example of FIG. 6, an apparatus 401, which may comprise e.g. a network element (network node (scheduling node), e.g. a LTE-A-capable base station (enhanced node-B, eNB)) may, in item 601, define a hybrid automatic repeat request profile for a user terminal 402. Alternatively or addition to that the hybrid automatic repeat request profile for the user terminal 402 may be defined in the user terminal 402 in item 602 (or in any other suitable network node). In item 603, downlink transmission may be transmitted from the base station 401 to the user terminal. In item 604, the downlink transmission is received in the user terminal 402. In item 605, uplink control information is transmitted from the user terminal 402 to the base station 401. In item 606, the uplink control information is received in the base station 401. In item 607, downlink retransmission may be transmitted from the base station 401 to the user terminal 402. In item 608, the downlink retransmission is received in the user terminal 402. According an exemplary embodiment, the hybrid automatic repeat request profile (downlink HARQ profile) indicates a first time interval between the downlink transmission being received in the user terminal 402 and the corresponding uplink control information being expected to be transmitted from the user terminal 402, and a second time interval between the uplink control information being transmitted from the user terminal 402 and the corresponding downlink retransmission at earliest being expected to be received in the user terminal 402.

[0059] The signalling chart of FIG. 7 illustrates the required signalling. In the example of FIG. 7, an apparatus 401, which may comprise e.g. a network element (network node (scheduling node), e.g. a LTE-A-capable base station (enhanced node-B, eNB)) may, in item 701, define a hybrid automatic repeat request profile for a user terminal 402. Alternatively or addition to that the hybrid automatic repeat request profile for the user terminal 402 may be defined in the user terminal 402 in item 702 (or in any other suitable network node). In item 703, uplink transmission may be transmitted from the user terminal 402 to the base station 401. In item 704, the uplink transmission is received in the base station 401. In item 705, downlink information is transmitted from the base station 401 to the user terminal 402. In item 706, the downlink information is received in the user terminal 402. In item 707, uplink retransmission may be

transmitted from the user terminal 402 to the base station 401. In item 708, the uplink retransmission is received in the base station 401. According an exemplary embodiment, the hybrid automatic repeat request profile (uplink HARQ profile) indicates a third time interval between the uplink transmission being received in the base station 401 and the corresponding downlink information being expected to be transmitted from the base station 401, and a fourth time interval between the downlink information being transmitted from the base station 401 and the corresponding uplink retransmission at earliest being expected to be received in the base station 401.

[0060] FIG. 8 is a flow chart illustrating an exemplary embodiment. The apparatus 401, 402, which may comprise e.g. a network element (network node (scheduling node), e.g. a LTE-A-capable base station (enhanced node-B, eNB), or a communication node (user terminal, UE)) may, in item 801, define a hybrid automatic repeat request profile for the user terminal 402.

[0061] In item 802, downlink transmission may be transmitted from the base station 401 to the user terminal. In item 803, uplink control information is received in the base station 401 from the user terminal 402. In item 804, downlink retransmission may be transmitted from the base station 401 to the user terminal 402. According an exemplary embodiment, the hybrid automatic repeat request profile indicates a first time interval between the downlink transmission being received in the user terminal 402 and the corresponding uplink control information being expected to be transmitted from the user terminal 402, and a second time interval between the uplink control information being transmitted from the user terminal 402 and the corresponding downlink retransmission at earliest being expected to be received in the user terminal 402.

[0063] Another option is that, in item 802, uplink transmission may be transmitted from the user terminal 402 to the base station 401. In item 803, downlink information is received in the user terminal 402 from the base station 401. In item 804, uplink retransmission may be transmitted from the user terminal 402 to the base station 401. According an exemplary embodiment, the hybrid automatic repeat request profile indicates a third time interval between the uplink transmission being received in the base station 401 and the corresponding downlink information being expected to be transmitted from the base station 401, and a fourth time interval between the downlink information being transmitted from the base station 401 and the corresponding uplink retransmission at earliest being expected to be received in the base station 401.

[0064] FIG. 9 is a flow chart illustrating an exemplary embodiment. The apparatus 401, 402, which may comprise e.g. a network element (network node (scheduling node), e.g. a LTE-A-capable base station (enhanced node-B, eNB), or a communication node (user terminal, UE)) may, in item 901, define a hybrid automatic repeat request profile for the user terminal 402.

[0065] In item 902, downlink transmission is received in the user terminal 402 from the base station 401. In item 903, uplink control information is transmitted from the user terminal 402 to the base station 401. In item 904, downlink retransmission is received in the user terminal 402 from the base station 401. According an exemplary embodiment, the hybrid automatic repeat request profile indicates a first time interval between the downlink transmission being received